

The AD-9 air dryer is a desiccant type, discharge line filtration system that removes solid and vapor contaminants and provides dry air to the brake system. It incorporates an automatic drain valve which is controlled by the compressor governor. The AD-9 is designed for vehicles that utilize compressors of up to 25cfm displacement and where normal compressor loaded time is no more than 60 seconds and unloaded time is 30 seconds or greater.

The AD-9 is offered in two different physical sizes. The smaller, and more common, AD-9 contains a 200 cu. in. purge volume and is intended for most truck and tractor applications. The larger version, or extended purge model, has a 300 cu. in. purge volume and is intended for higher air usage vehicles such as transit coaches. In addition to the two sizes, a special version of the AD-9 is available for use on European style air systems that incorporate the unloader function in a separate valve known as the Discharge Line Unloader (DLU) valve. When the AD-9, DLU model, is used in this type of system, the need for the Discharge Line Unloader valve is eliminated.

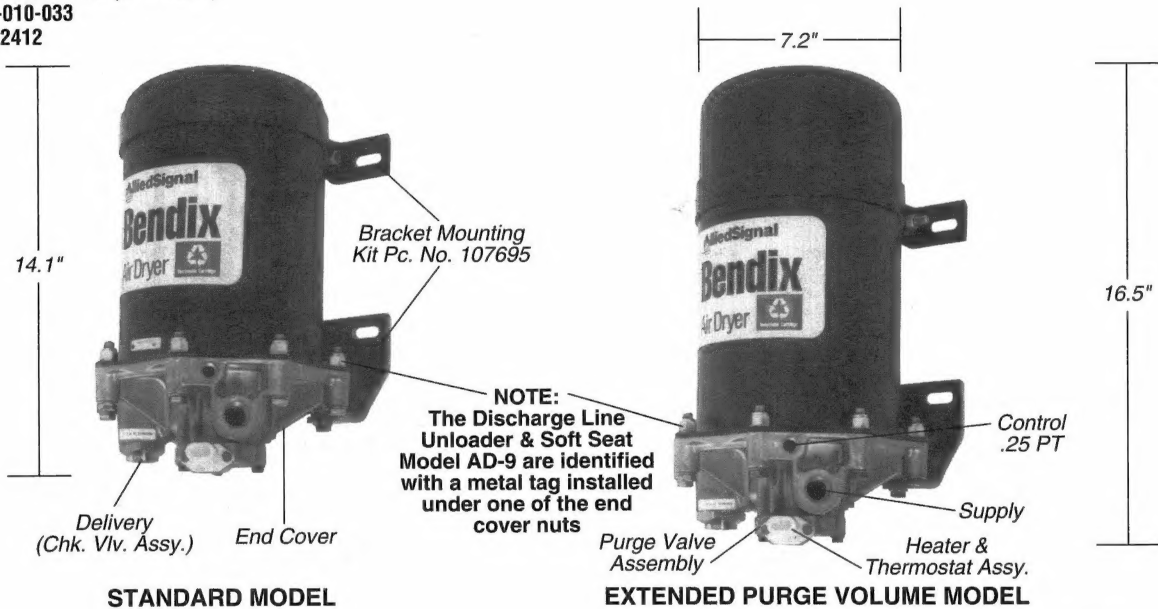
All AD-9 Air Dryers are equipped with either a 12 or 24 volt, 75 watt heater and thermostat assembly which is now serviceable as a separate assembly.

For additional maintenance and technical information see Service Data Sheet SD-08-2412.

WEIGHT - 28 LBS. APPROX. (STD. AD-9)

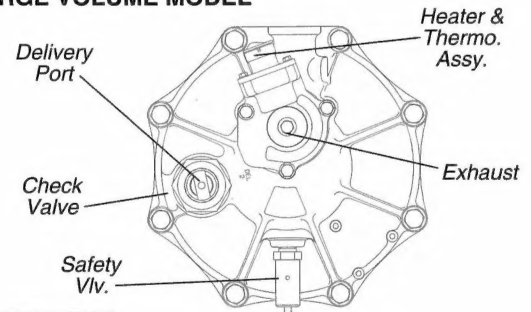
VMRS NO. - 13-010-033

DEVICE CODE - 2412



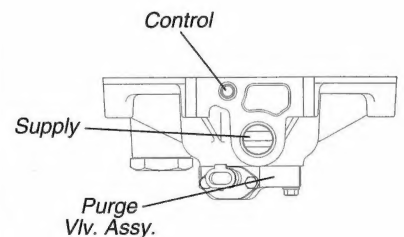
Universal Kits & Replacement Assemblies

Part No.	Description
107796	Service New - Desiccant Cartridge
107794	Reman. Exchg. - Desiccant Cartridge
109579	24 Volt Heater & Thermo.
109578	12 Volt Heater & Thermo.
107798	Purge Valve Assy. Maintenance Kit
107695	Bracket Kit

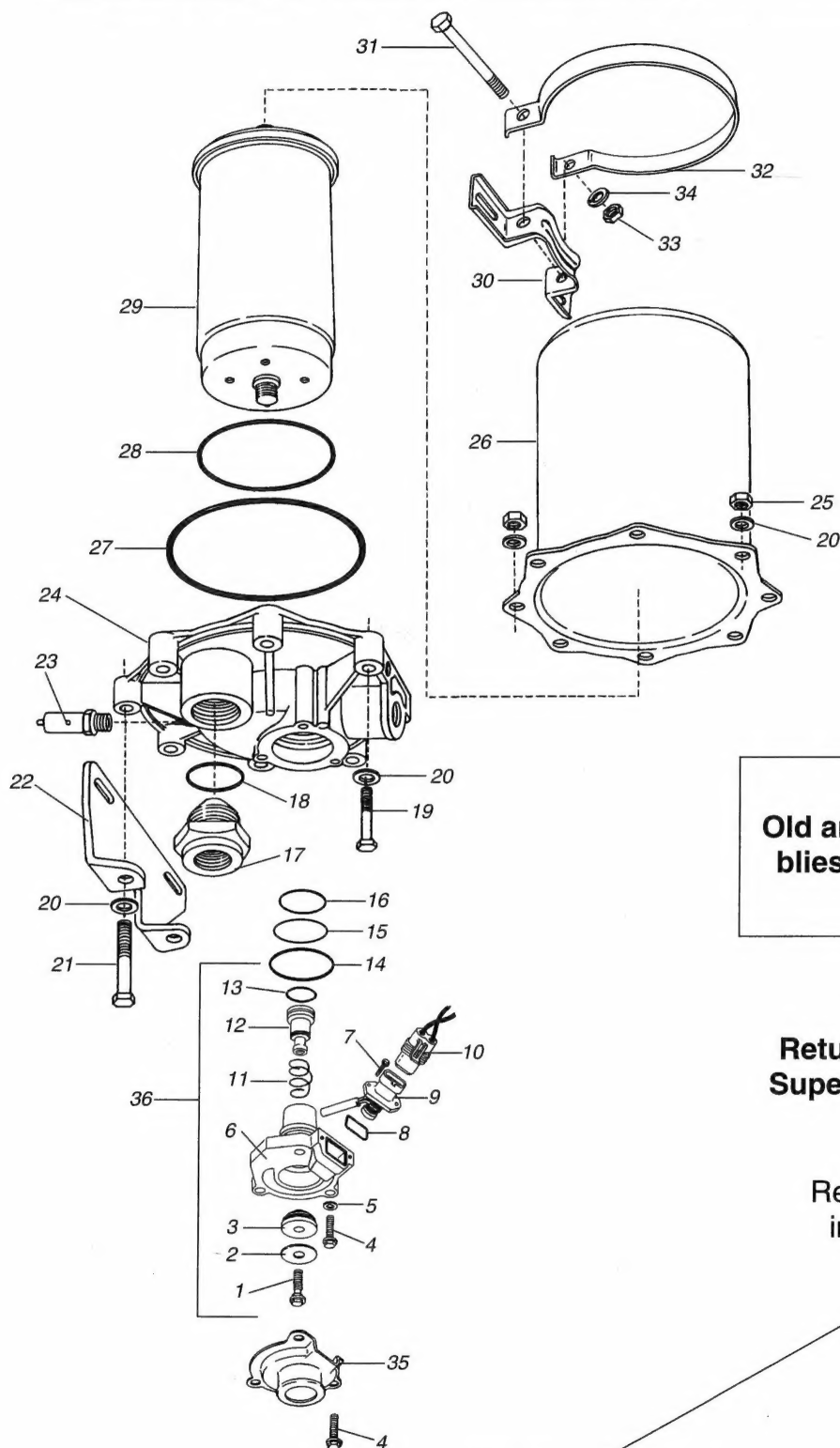


End Cover Bottom View

AD-9 Service Part No.	AD-9 Reman. Exch. Part No.	End Cover Information and Detail							Comments
		End Cover Assy. Compl't. New	Supply & Delivery Port Size	Check Valve Assy.	Purge Valve Assy.				
					Heater Voltage (75 Watt)	Purge Vlv. Assy. Compl't. w/Heater New	Purge Vlv. Assy. Compl't. w/Heater Reman.	Heater & Thermo. Kit	
65224	—	65229	.75" PT	107799	24	109570	109695	109579	
65225	109685	65231	.50" PT	107800	12	109569	109686	109578	
65226	109687	65230	.75" PT	107799	12	109569	109686	109578	
65227	109688	65229	.75" PT	107799	24	109570	109695	109579	Extended Purge
65228	—	65230	.75" PT	107799	12	109569	109686	109578	Extended Purge
65243	—	65231	.50" PT	107800	12	109569	109686	109578	Extended Purge
65453	—	65454	.50" PT	107800	24	109570	109695	109579	Extended Purge
65499	—	65498	.50" PT	107800	12	109580	—	109578	Discharge Line Unloader Mode
65605	—	65604	.50" PT	107800	24	109599	—	109579	Discharge Line Unloader Mode
65649	—	65653	.75" PT	107799	24	109570	109695	109579	Soft Seat
65650	109689	65654	.50" PT	107800	12	109569	109686	109578	Soft Seat
65651	109690	65655	.75" PT	107799	12	109569	109686	109578	Soft Seat
65652	109691	65653	.75" PT	107799	24	109570	109695	109579	Soft Seat - Extended Purge



End Cover Side View



IMPORTANT
Old and new purge valve assemblies are interchangeable in all AD-9 Air Dryers

Obsolete
Return for Core Credit Toward
Superseding Reman. Assembly



Replace obsolete units with
interchangeable Reman.
assys. below

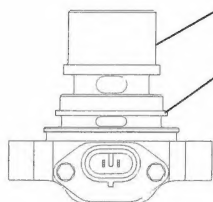
Standard Version Purge Valve

Assy.
New 109569 - 12 V
Reman 109686 - 12 V
New 109570 - 24 V
Reman 109695 - 24 V

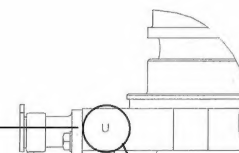
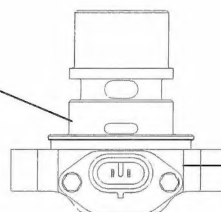
Discharge Line Unloader Purge

Valve Assy.
New 109580 - 12 V
New 109599 - 24 V

Letter "U" Stamped Here
to Identify DLU Version



Support for
o-ring (15)
missing on
DLU versions



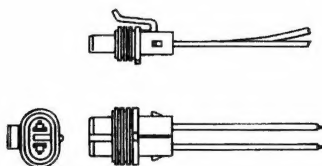
AD-9 Air Dryer Parts List Kits and Service Replacement Assemblies

Key	Description	New Replmt Purge Vlv. Assy. Complt. w/Heater 109569 - 12v 109570 - 24v	Reman Purge Vlv. Assy. Complt. w/Heater 109686 - 12v 109695 - 24v	New Replmt Purge Vlv. Assy. Complt. w/Heater (DLU) 109580 - 12v 109599 - 24v	Desiccant Cartridge Kit New - 107796 Reman - 107794	Purge Vlv. Maint. Kit 107798	Heater & Thermo Kit 109578 - 12v 109579 - 24v (See Note 1)	Check Vlv. Maint. Kit 107799 - 3/4" 107800 - 1/2"	Mounting Brkt. Kit 107695
1	Purge Valve Shoulder Bolt					X			
2	Exhaust Diaphragm					X			
3	Purge Valve					X			
4	1/4" Tapping Screw	X-3	X-3	X-3		X-3			
5	Flat Washer	X-3	X-3	X-3					
6	Purge Valve Housing								
7	#8 Self Tapping Screw						X-2		
8	Sealing Ring						X		
9	Heater & Thermostat Assy.						X		
10	Wire Harness & Connector	298948							
11	Spring					X			
12	Purge Piston								
13	O-Ring					X			
14	O-Ring	X	X	X		X	X		
15	O-Ring	X	X			X	X		
16	O-Ring	X	X	X		X	X		
17	Check Valve Assy.							X	
18	Check Valve O-Ring							X	
19	3/8" x 2 1/8" End Cover Cap Screw								
20	3/8" Special Washer								X-4
21	3/8" x 2 3/8" Bracket Cap Screw								X-2
22	Lower Mounting Bracket								X
23	Safety Valve	285849							
24	End Cover								
25	Lock Nut								X-2
26	Housing								
27	O-Ring				X				
28	O-Ring				X				
29	Desiccant Cartridge Assy.				X				
30	Upper Mounting Brkt.								X
31	5/16" x 4 1/2" Upper Brkt. Bolt								X
32	Upper Brkt. Strap								X
33	5/16" Nut								X
34	5/16" Lock Washer								X
35	Exhaust Cover (See Note 2)	112399							
36	Complete Purge Valve Assy.	X	X	X					

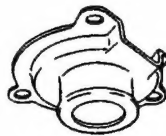
GENERAL: All kits and replacement parts and assemblies can be used in any version of the AD-9 unless otherwise noted.

Note 1: These heater and thermostat kits are for use in the new replacement purge valve assemblies and can not be installed in the old configuration purge valve assembly.

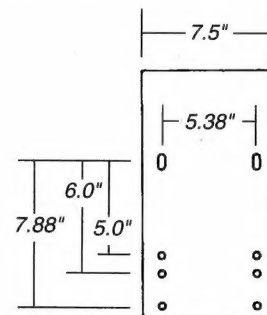
Note 2: The service AD-9 Air Dryers listed are not supplied with an extended exhaust cover, however the extended exhaust cover Pc No. 112399 can be installed on any new purge valve assemblies to allow the connection of a hose to direct expelled contaminants, away from the vehicle. This exhaust cover is available as a separate item.



Wiring Harness & Connector
Pc. No. 298948

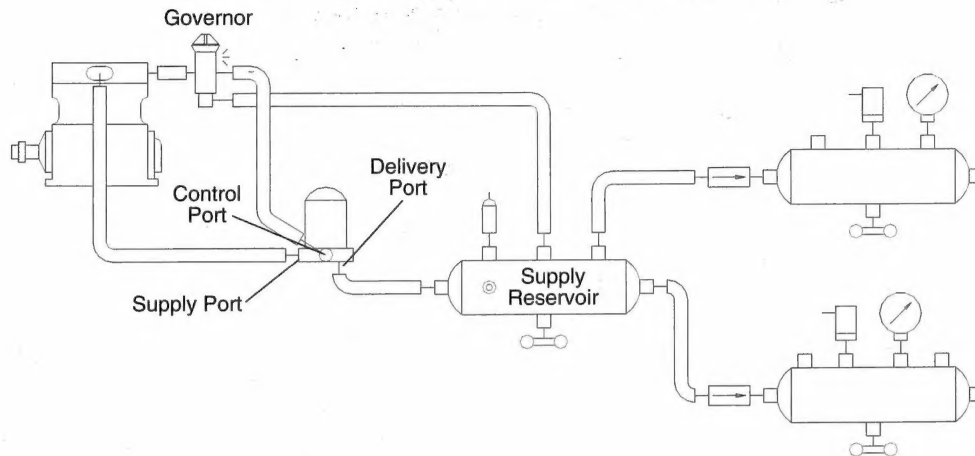


Extended Exhaust Cover
Pc. No. 112399

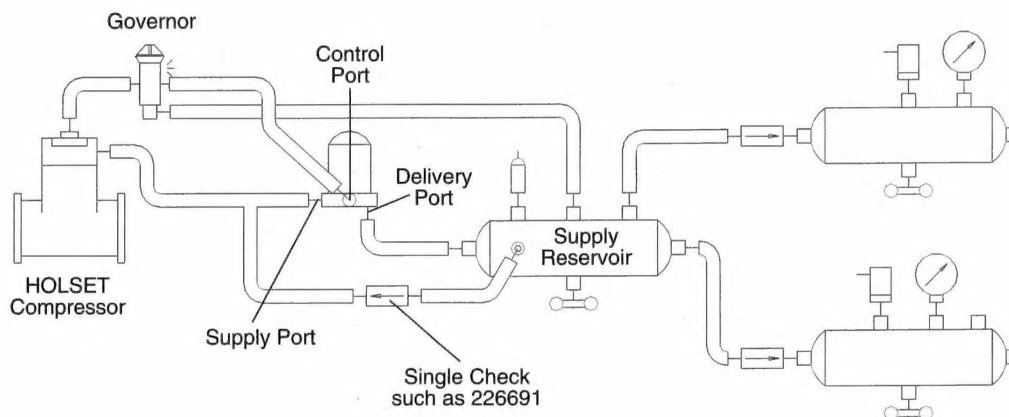


**Universal Mounting
Plate**
Pc. No. 248478
(Can be used to
mount ANY Air Dryer
to vehicle)

AD-9 in Standard Charging System



Holset Compressor and Soft Seat AD-9 Charging System



DLU Model AD-9 in Discharge Line Unloader Charging System (Discharge Line Unloader Valve Replaced by AD-9)

